UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

535 7590 08/21/2008

K.F. ROSS P.C. 5683 RIVERDALE AVENUE

SUITE 203 BOX 900 BRONX, NY 10471-0900 EXAMINER ODOM, CURTIS B

ART UNIT PAPER NUMBER

2611 DATE MAILED: 08/21/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/534,993	10/20/2005	Donato Ettorre	23293	1907

TITLE OF INVENTION: METHOD AND DEVICE FOR FINE SYNCHRONIZATION OF A DIGITAL TELECOMMUNICATION RECEIVER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/21/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees wil spondence address; a	ll be ma and/or (t	illed to the current  o) indicating a sepa	correspondence address as rate "FEE ADDRESS" for
	ENCE ADDRESS (Note: Use Bi	ock 1 for any change of address)	papa	e: A certificate of m s) Transmittal. This ers. Each additional p e its own certificate of	paper, si	uch as an assignmei	domestic mailings of the or any other accompanying nt or formal drawing, must
K.F. ROSS P.C 5683 RIVERDA SUITE 203 BO	LE AVENUE K 900	/2008	Lbe	Certify that this	ficate of	Mailing or Transi Transmittal is being	nission deposited with the United t class mail in an envelope above, or being facsimile tte indicated below.
BRONX, NY 10	1471-0900						(Depositor's name)
			<u> </u>				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	,	ATTORN	EY DOCKET NO.	CONFIRMATION NO.
10/534,993 TITLE OF INVENTION	10/20/2005 I: METHOD AND DEVI	CE FOR FINE SYNCHR	Donato Ettorre CONIZATION OF A DIGI	TAL TELECOMMU	NICAT	23293 ION RECEIVER	1907
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	11/21/2008
EXAM	IINER	ART UNIT	CLASS-SUBCLASS	]			
ODOM, O	CURTIS B	2611	375-355000				
"Fee Address" ind PTO/SB/47; Rev 03- Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DATA	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON 2	2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or ty data will appear on the p Ta substitute for filine an	3 registered patent vely, e firm (having as a nagent) and the names rneys or agents. If no printed.	nember s of up to o name i	a 2 o s 3	cument has been filed for
(A) NAME OF ASSI	GNEE	categories (will not be pr	(B) RESIDENCE: (CITY	and STATE OR CO	UNTR	Y)	up entity 🚨 Government
4a. The following fee(s)  Issue Fee Publication Fee (N	vo small entity discount p		o. Payment of Fee(s): (Plea     A check is enclosed.     Payment by credit car     The Director is hereby overpayment, to Depo	d. Form PTO-2038 i	is attach	ed.	
	s SMALL ENTITY state	is. See 37 CFR I.27.	b. Applicant is no lon				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regist	ered atto	orney or agent; or th	e assignee or other party in
Authorized Signature				Date			
Typed or printed name			Registration No				
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR (	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	retain a benefit by the imated to take 12 mi idual case. Any com er, U.S. Patent and To D THIS ADDRESS.	e public inutes to iments of rademar SEND T	which is to file (and complete, including on the amount of tin k Office, U.S. Depa TO: Commissioner f	by the USPTO to process) g gathering, preparing, and ne you require to complete atment of Commerce, P.O. for Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



### UNITED STATES PATENT AND TRADEMARK OFFICE

#### NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 08/21/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/534,993	10/20/2005	Donato Ettorre	23293	1907	
535	7590 08/21/2008		EXAMINER		
K.F. ROSS P.C.			ODOM, CURTIS B		
5683 RIVERDALE AVENUE			ART UNIT	PAPER NUMBER	
SUITE 203 BOX 900			2611		
BRONX, NY 10471-0900			DAME MARKED CONTROLS		

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 610 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 610 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)		
10/534,993	ETTORRE ET AL.		
Examiner	Art Unit		
CURTIS B. ODOM	2611		

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. All This communication is responsive to 5/16/2005.

2. All The allowed claim(s) is/are 1-21.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

2. Certified copies of the priority documents have been received in Application No.

 Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has	THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements
noted below.	Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE	-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

# Attachment(s)

Notice of References Cited (PTO-892)

2. Notice of Draftperson's Patent Drawing Review (PTO 946).

 MInformation Disclosure Statements (PTO/SB/08), Pacer No./Mail Date

Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. Notice of Informal Patent Application

Interview Summery (PTG-413)
 Paper No./Mail Date

 The Examiner's Amendment/Comment

8. 

■ Examiner's Statement of Reasons for Allowance

9. 🔲 Other \_\_\_\_

## Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Claims 1-21 are
allowable over prior art references because related references do not disclose all the limitations
of the claims, in particular, a synchronization device including three digitally controlled
interpolators, wherein the sign of an error signal is used to control the interpolators, and the time
resolution between the interpolators is different.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bultan et al. (U. S. Patent No. 7, 206, 335) and Li (US 2004/0029609) disclose synchronization using interpolation.
- Any inquiry concerning this communication or earlier communications from the examiner should be directed to CURTIS B. ODOM whose telephone number is (571)272-3046.
   The examiner can normally be reached on Monday- Friday, 9-5:30.

Art Unit: 2611

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Curtis B. Odom/ Primary Examiner, Art Unit 2611 August 16, 2008